

CLAIMS

What is claimed is:

1. In a communication session between devices, a method for selectively replaying voice data on a device, the method comprising:

receiving voice data at a device;

playing the voice data being received at the device;

buffering the voice data in a buffer of the device;

receiving input from a recipient to replay at least a portion of the buffered voice data from the buffer; and

replaying the portion of the buffered voice data.

2. A method as defined in claim 1, wherein receiving voice data at a device further comprises receiving voice data from one or more senders.

3. A method as defined in claim 2, wherein buffering the voice data in a buffer of the device further comprises:

buffering voice data of a first sender in the buffer; and

buffering voice data of one or more subsequent senders in the buffer, wherein a silence between the first sender and the one or more subsequent senders is not stored in the buffer.

4. A method as defined in claim 2, wherein receiving input from a recipient to replay at least a portion of the buffered voice data from the buffer further comprises accessing the buffer based on a pre-determined time period.

5. A method as defined in claim 2, wherein receiving input from a recipient to replay at least a portion of the buffered voice data from the buffer further comprises accessing the buffer based on a particular sender.

6. A method as defined in claim 1, wherein replaying the portion of the buffered voice data further comprises:

playing the portion of the voice data from the buffer until the voice data in the buffer catches up to the voice data being received at the device; and
resuming playing the voice data being received at the device.

7. A method as defined in claim 1, wherein replaying the portion of the voice data from the buffer further comprises playing the portion of the voice data from a point in the buffer that corresponds to a beginning of a voice data segment of a particular sender.

8. A method as defined in claim 1, wherein replaying the portion of the voice data from the buffer further comprises playing the portion of the voice data from a point in the buffer that corresponds to a time period.

9. A method as defined in claim 1, wherein replaying the portion of the voice data from the buffer further comprises:

stopping the voice data in the buffer from being played; and

resuming playing the voice data being received at the device.

10. A method as defined in claim 1, wherein replaying the portion of the voice data from the buffer further comprises receiving input from the recipient to access the buffer at a different location to replay another portion of the buffered voice data.

11. A method as defined in claim 10, further comprising continuing to buffer voice data that is received at the device while receiving input from the recipient.

12. A method as defined in claim 1, further comprising deleting the voice data in the buffer when the communication session terminates.

13. A method as defined in claim 1, further comprising deleting the voice data in the buffer a pre-determined period of time after the communication session terminates.

14. A method as defined in claim 1, wherein at least one device participating in the communication session is associated with a circuit-switched network.

15. A method as defined in claim 1, wherein at least one device participating in the communication session is associated with a packet data network

16. A method as defined in claim 1, wherein at least one device participating in the communication session is associated with RF communication techniques

17. A method as defined in claim 1, wherein the communication session is associated with a network-based instant connect call.

18. A method as defined in claim 1, wherein replaying the portion of the buffered voice data comprises replaying voice data that originated from a remote device without replaying voice data originating locally at the device used by the recipient.

19. In an instant connect call between devices, a method for selectively replaying voice data received by a device, the method comprising:

receiving voice data at a device of a recipient in an instant connect call;

playing the voice data being received at the device while buffering the voice data in a buffer; and

in response to input from the recipient during the instant connect call:

preventing voice data being received from being played while continuing

to buffer the voice data in the buffer; and

replaying at least a portion of the buffered voice data from the buffer.

20. A method as defined in claim 19, wherein replaying at least a portion of the buffered voice data from the buffer further comprises accessing the buffer at a beginning of a most recent statement of a most recent sender.

21. A method as defined in claim 19, wherein replaying at least a portion of the buffered voice data from the buffer further comprises accessing the buffer at a first location that is prior to a time when the input from the recipient is received.

22. A method as defined in claim 21, wherein replaying at least a portion of the buffered voice data from the buffer further comprises receiving a second input from the recipient to access the buffer at a second location relative to the first location.

23. A method as defined in claim 19, wherein replaying at least a portion of the buffered voice data from the buffer further comprises:

receiving a second input from the recipient to terminate replaying the portion of the buffered voice data; and

resuming playing the voice data being received at the device.

24. A method as defined in claim 19, wherein playing the voice data being received at the device while buffering the voice data in a buffer further comprises buffering voice data from one or more senders.

25. A method as defined in claim 19, further comprising deleting the buffered voice data when the instant connect call ends or a pre-determined amount of time after the instant connect call ends.

26. A method as defined in claim 19, further comprising permanently storing a portion of the buffered voice data in a permanent memory.

27. A method as defined in claim 19, wherein replaying at least a portion of the buffered voice data from the buffer further comprises replaying the portion of the buffered voice data at an increased rate.

28. A method as defined in claim 19, wherein buffering the voice data in a buffer further comprises removing silences between one or more senders such that silences are not buffered.

29. A method as defined in claim 19, further comprising:

determining that the buffered voice data is missing packets;

requesting the missing packets from a server, wherein the server is a network server or an application server; and

inserting packets that are received from the server and that correspond to the missing packets into the buffered voice data to improve a quality of the buffered voice data.

30. A method as defined in claim 19, wherein the instant connect call is established in a peer-to-peer manner between the recipient device and a sender device, the method further comprising:

determining that the buffered voice data is missing packets;

requesting the missing packets from the sender device; and

inserting packets that are received from the sender device and that correspond to the missing packets into the buffered voice data to improve a quality of the buffered voice data.

31. In an instant connect call between devices, a method for replaying voice data at a device of a recipient, the method comprising:

playing voice data being received at a device of a recipient during an instant connect call;

buffering the voice data in a buffer while playing the voice data;

in the buffered voice data, replacing one or more packets that were dropped from the voice data received by the device; and

in response to input from the recipient during the instant connect call:

preventing voice data being received from being played while continuing to buffer the voice data in the buffer; and

replaying at least a portion of the buffered voice data from the buffer.

32. A method as defined in claim 31, wherein replacing one or more packets that were dropped from the voice data received by the device further comprises:

requesting the dropped packets from a server, wherein the server is a network server or an application server; and

inserting the replacement packets received from the server into the buffered voice data.

33. A method as defined in claim 31, wherein replaying at least a portion of the buffered voice data from the buffer further comprises one or more of:

accessing the buffered voice data in a sender increment such that the buffered voice data is replayed at a location that corresponds to a beginning of a statement of a particular sender; and

accessing the buffered voice data in a time increment such that the buffered voice data is replayed from a location that is an amount of time relative to when the input from the recipient was received.

34. A method as defined in claim 32, wherein replaying at least a portion of the buffered voice data from the buffer further comprises continuing to request dropped packets from the server.

35. A method as defined in claim 31, further comprising causing the device to play the voice data being received by the device when replaying the buffered voice data catches up to voice data being received at the device.

36. A method as defined in claim 31, further comprising replaying the buffered voice data at a faster rate.

37. In a system that includes devices that are configured to engage in an instant connect call, a device that selectively replays the voice data of an instant connect call without missing voice data that is transmitted while voice data is being replayed, the device comprising:

a buffer used to temporarily buffer voice data received during an instant connect call;

a playback module that plays voice data being received during the instant connect call;

a replay button that, when activated by a recipient, (i) prevents the voice data being received from being played, (ii) causes buffered voice data from the buffer to be played by the device, and (iii) ensures that voice data received after the replay button is activated is buffered in the buffer.

38. A device as defined in claim 37, wherein statements from different senders are stored sequentially in the buffer.

39. A device as defined in claim 37, further comprising a buffer control, wherein the buffer control (i) determines that the voice data received at the device and buffered in the buffer is missing packets, (ii) requests the missing packets from a server, and (iii) inserts packets received from the server that correspond to the missing packets into the buffer such that a quality of the buffered voice data is better than a quality of the voice data originally received at the device.

40. A device as defined in claim 39, wherein voice data received by the device is continually buffered by the device while the playback module replays buffered voice data.

41. A device as defined in claim 39, wherein the buffer control module deletes the buffered voice data (i) when an instant connect call ends, (ii) a pre-determined amount of time after the instant connect call ends, or (iii) when a new instant connect call begins.

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42. In a server that operates in a communication network in which communication sessions are established between devices, a method for buffering voice data such that the voice data can be selectively replayed on a device, the method comprising:

during the communication session, as packets of voice data are transmitted via the communications network from a sender device to a recipient device, buffering the packets of the voice data at the server;

in response to the recipient device determining that at least some of the packets are missing and receiving input from a recipient requesting the voice data to be replayed at the recipient device, receiving a request from the recipient device for the missing packets; and

sending the missing packets to the recipient device such that the recipient device can replay the voice data.

43. A method as defined in claim 42, wherein the server comprises one of a network server and an application server.

44. A method as defined in claim 42, wherein the recipient device replays the voice data by accessing packets from a local buffer and adding thereto the missing packets received from the server.

45. A method as defined in claim 42, wherein the communication session is associated with a network-based instant connect call established over a packet data network.

46. In a device operating in a communication network, a method for saving a missed network-based instant connect call to enable later access thereto, the method comprising:

receiving voice data associated with an instant connect call at a device and generating a signal that is adapted for notifying a recipient that the instant connect call has been initiated;

buffering the voice data in a buffer of the device;

determining that the recipient has not participated in the instant connect call; and

storing at least a portion of the buffered voice data to a memory of the device such that the stored portion can be later accessed by the recipient.

47. A method as defined in claim 46, wherein determining that the recipient has not participated comprises determining that the recipient has not depressed a button of the device.

48. A method as defined in claim 46, further comprising playing the stored portion of the voice data at the device in response to input from the recipient.